FIG. 1

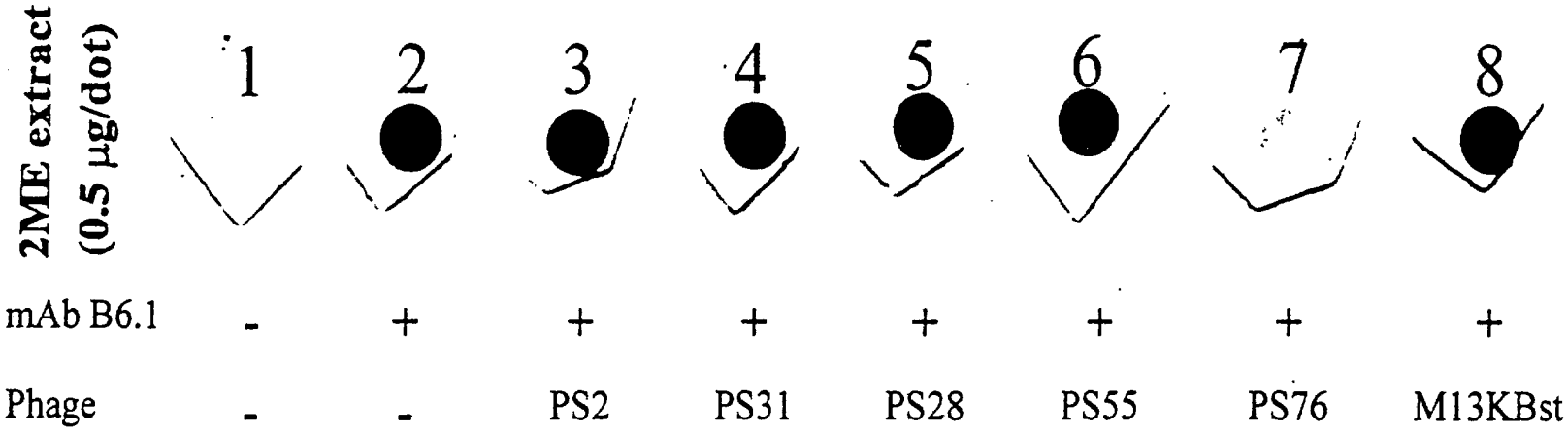

2ME extract
(0.5 µg/dot)
1
2
3
4
5
6
7
8
mAb B6.1
- + + + + + + +
Phage
- - PS2 PS31 PS28 PS55 PS76 M13KBst

FIG. 2

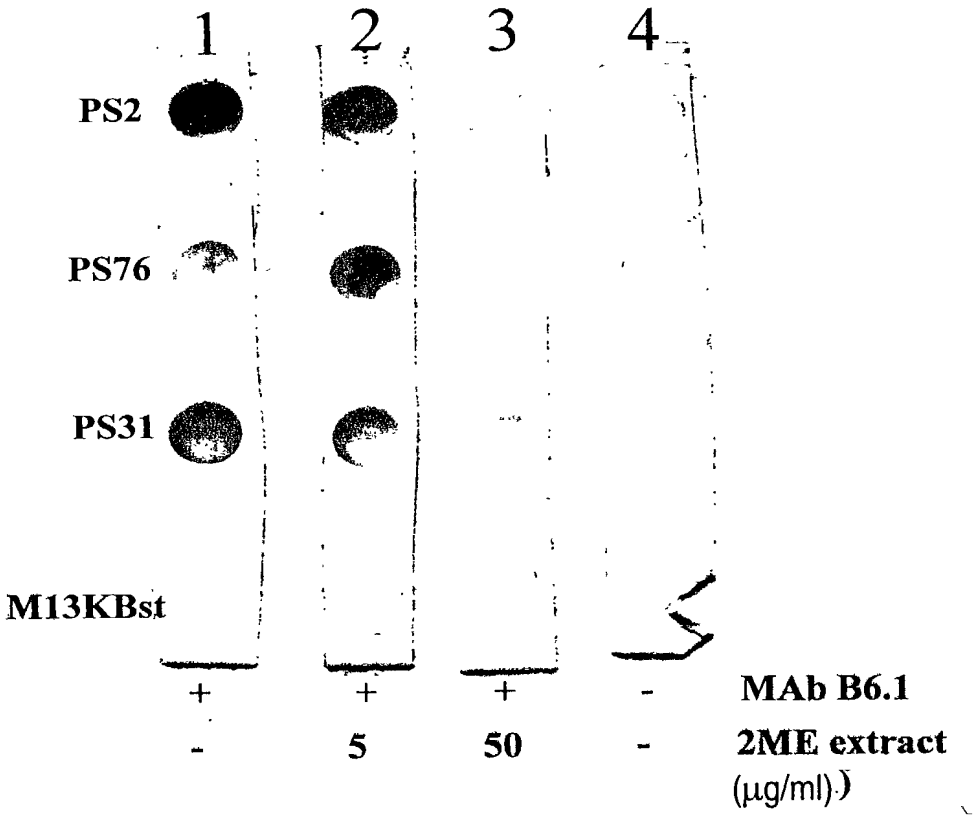


FIG. 3

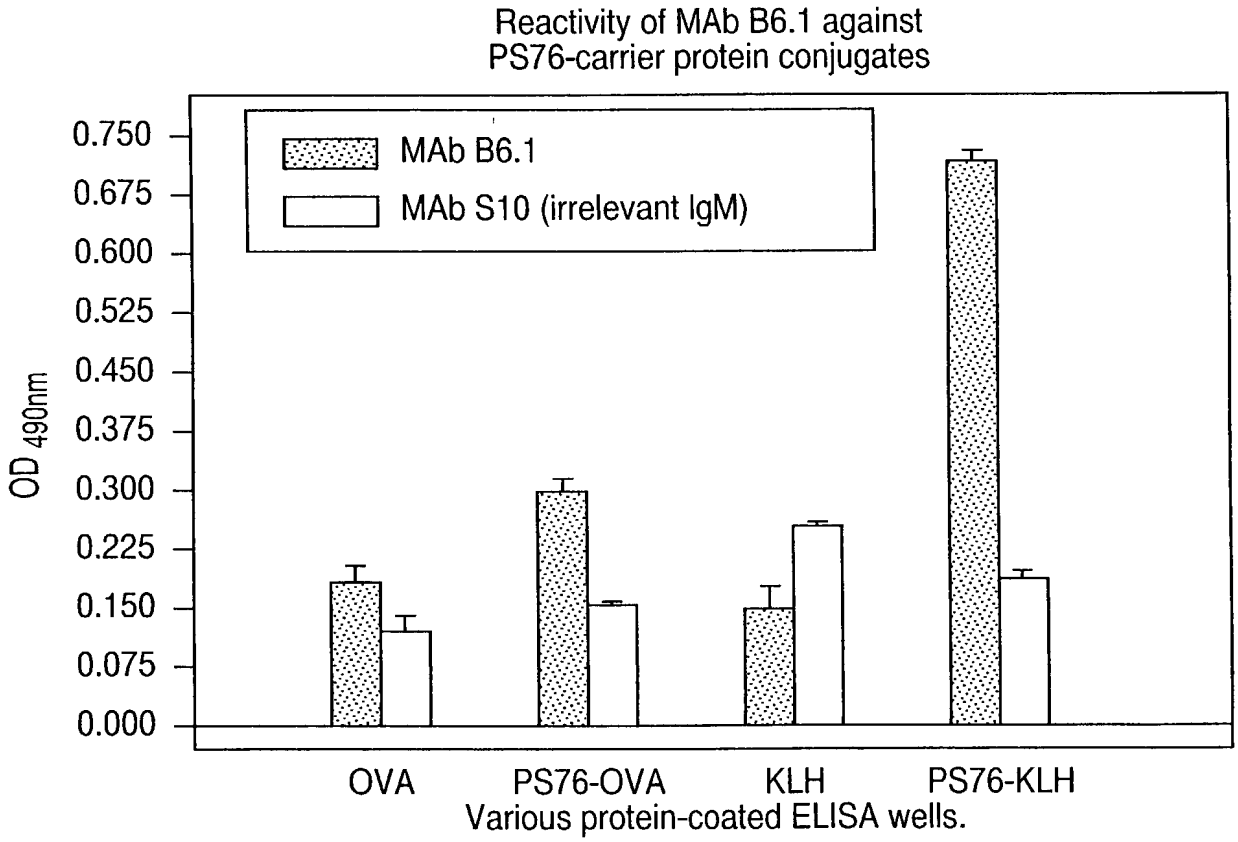

Reactivity of MAb B6.1 against
PS76-carrier protein conjugates
MAb B6.1
MAb S10 (irrelevant IgM)
OD 490nm
0.750
0.675
0.600
0.525
0.450
0.375
0.300
0.225
0.150
0.075
0.000
OVA
PS76-OVA
KLH
PS76-KLH
Various protein-coated ELISA wells.

FIG. 4

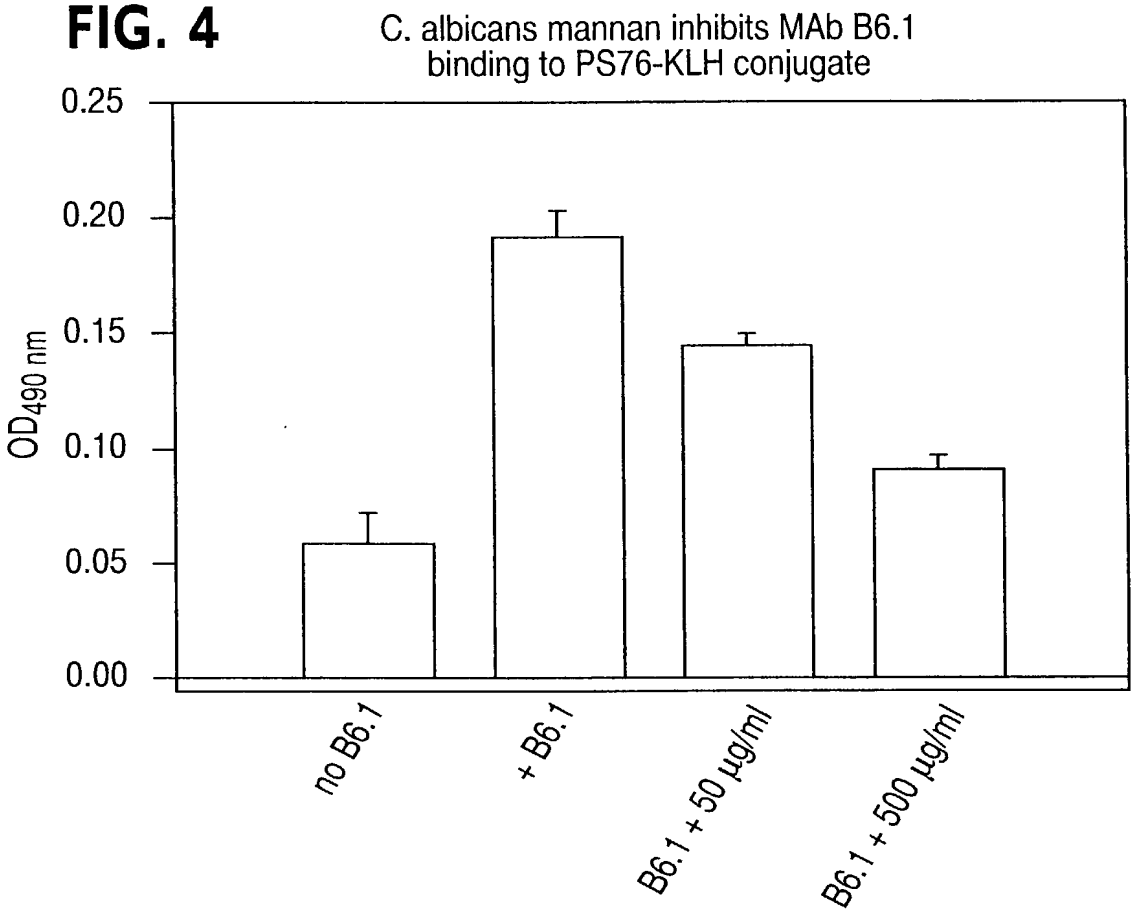
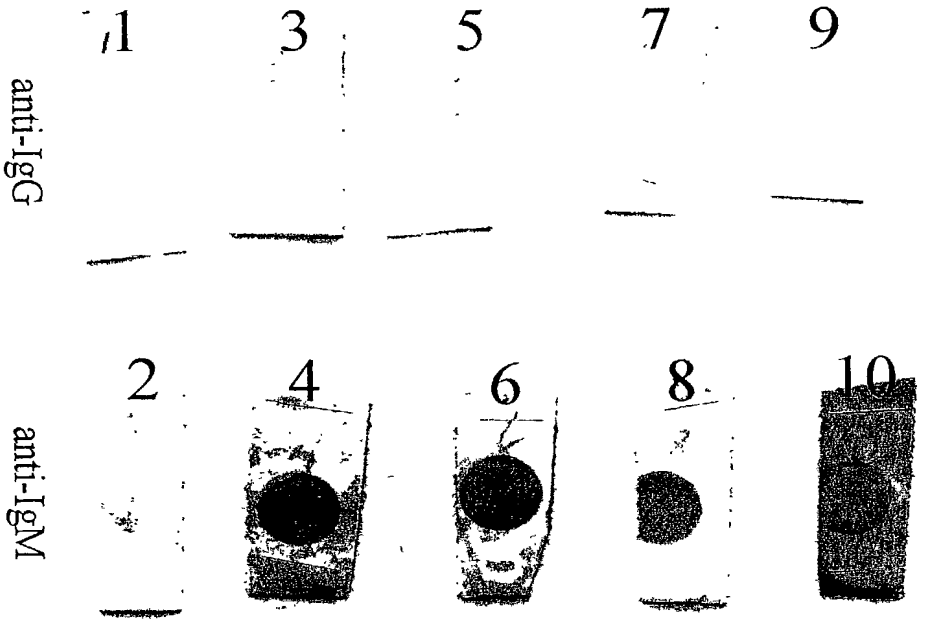
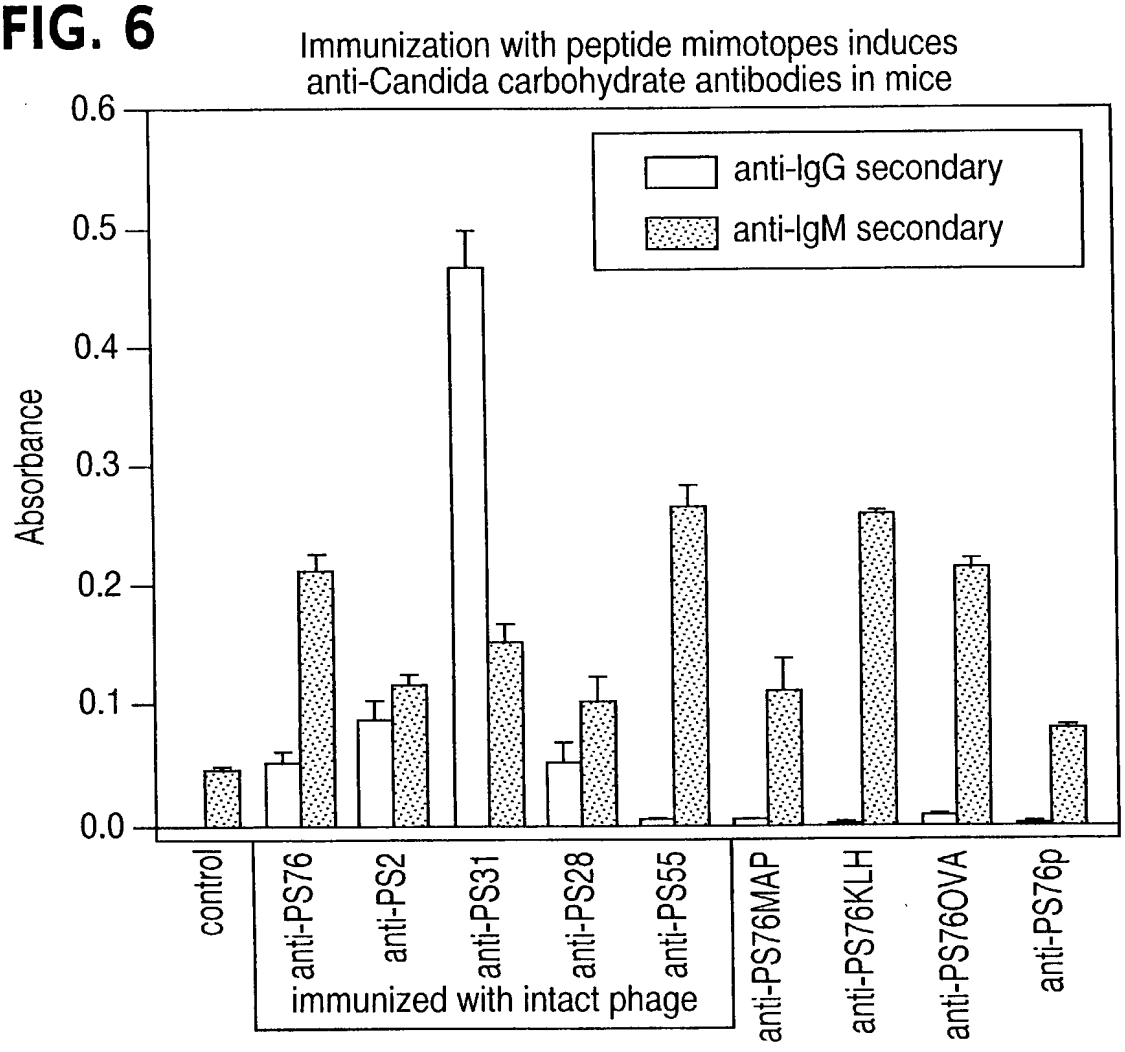

C. albicans mannan inhibits MAb B6.1 binding to PS76-KLH conjugate
0.25
0.20
0.15
0.10
0.05
0.00
OD490 nm
no B6.1
+ B6.1
B6.1 + 50 µg/ml
B6.1 + 500 µg/ml
PS76-KLH coated ELISA wells incubated with or without antibody plus 2 ME extract

FIG. 5



Dots 1, 2 - normal mouse serum; Dots 3-10 - serum from peptide-immunized mice; Odd dots - IgG detection; Even - IgM detection

FIG. 6



Absorbance = OD_{490nm} (Ab+2ME extract) - OD_{490nm} (Ab + irrelevant CHO)

Microtiter plate wells were coated with 2ME extract or an irrelevant carbohydrate. Mice were immunized with synthetic peptide, branched synthetic peptide, peptide carrier protein conjugates, or phage-displayed peptide mimotopes.

FIG. 7

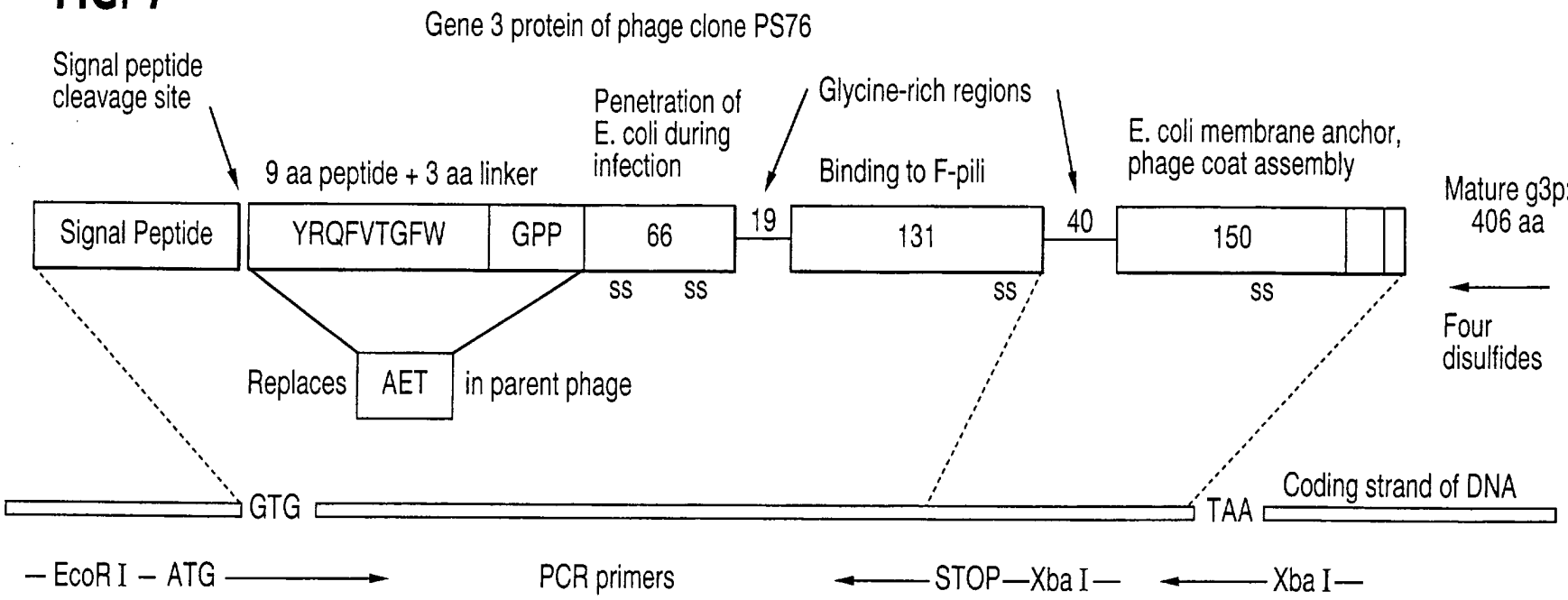

Gene 3 protein of phage clone PS76
Signal peptide cleavage site
9 aa peptide + 3 aa linker
Penetration of E. coli during infection
Glycine-rich regions
Binding to F-pili
E. coli membrane anchor, phage coat assembly
Mature g3p: 406 aa
Signal Peptide
YRQFVTGFW
GPP
66
19
131
40
150
ss
ss
ss
ss
Four disulfides
Replaces
AET
in parent phage
GTG
TAA
Coding strand of DNA
— EcoR I — ATG
PCR primers
STOP—Xba I—
Xba I—

FIG. 8A

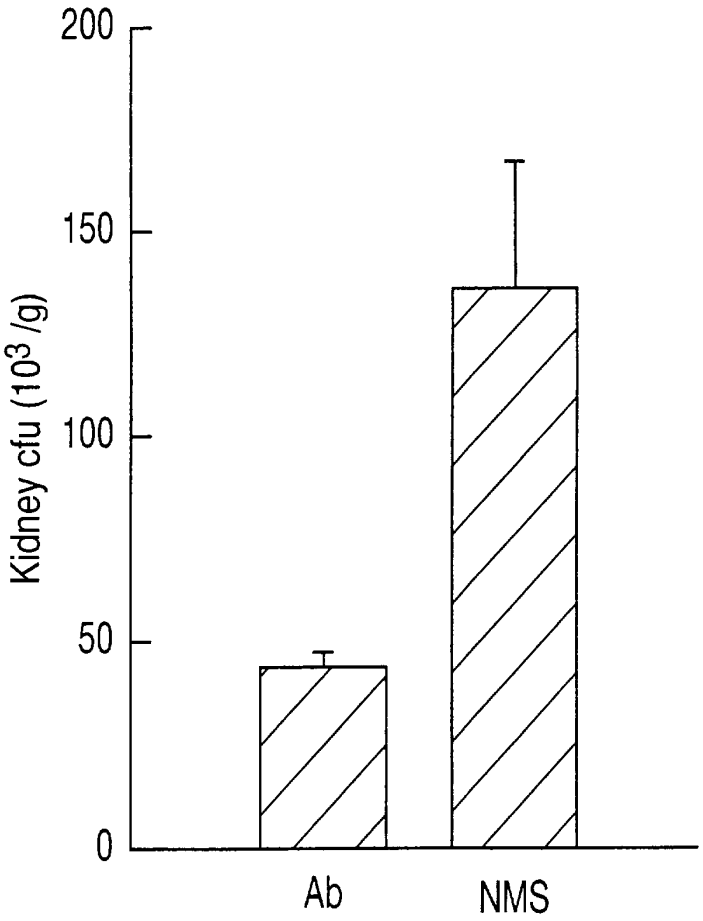

200
150
100
50
0
Kidney cfu (10^3 /g)
Ab
NMS

FIG. 8B

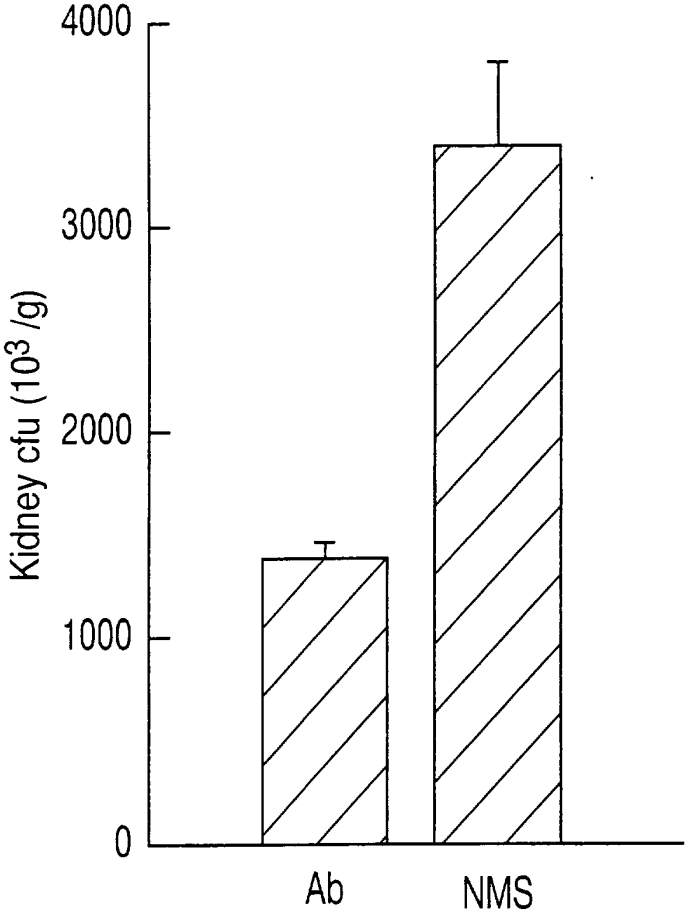

4000
3000
2000
1000
0
Kidney cfu (10^3 /g)
Ab
NMS

FIG. 9A

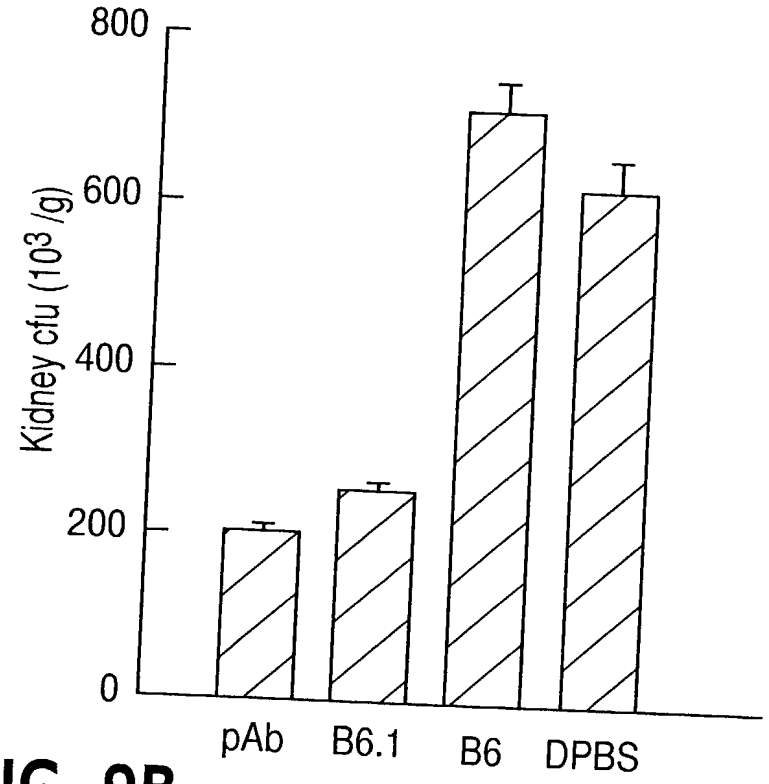

800
600
400
200
0
Kidney cfu (10^3/g)
pAb
B6.1
B6
DPBS

FIG. 9B

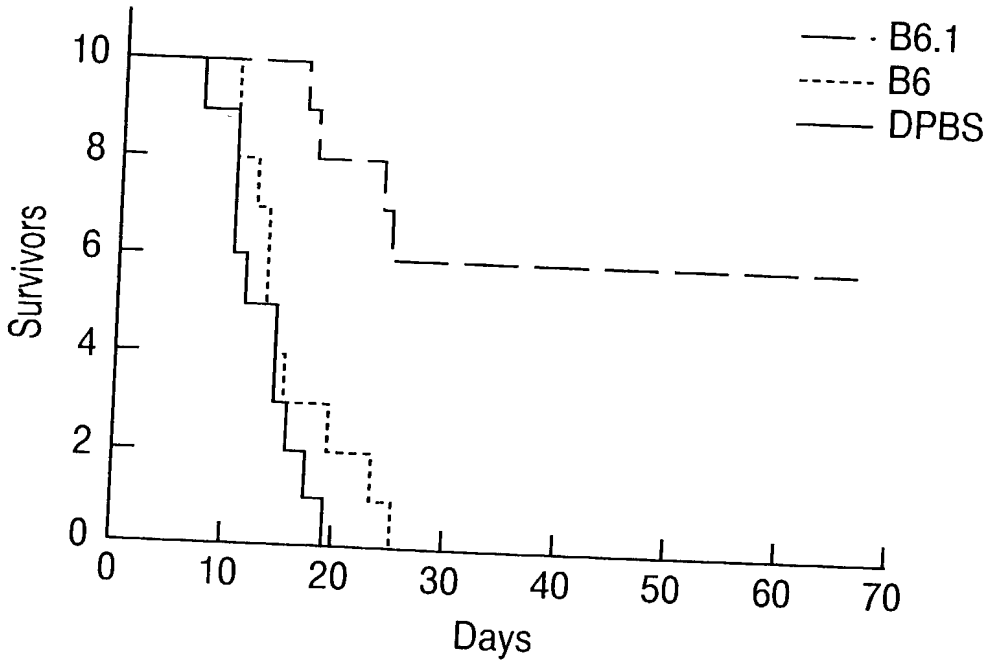

B6.1
B6
DPBS
10
8
6
4
2
0
Survivors
0
10
20
30
40
50
60
70
Days

FIG. 10

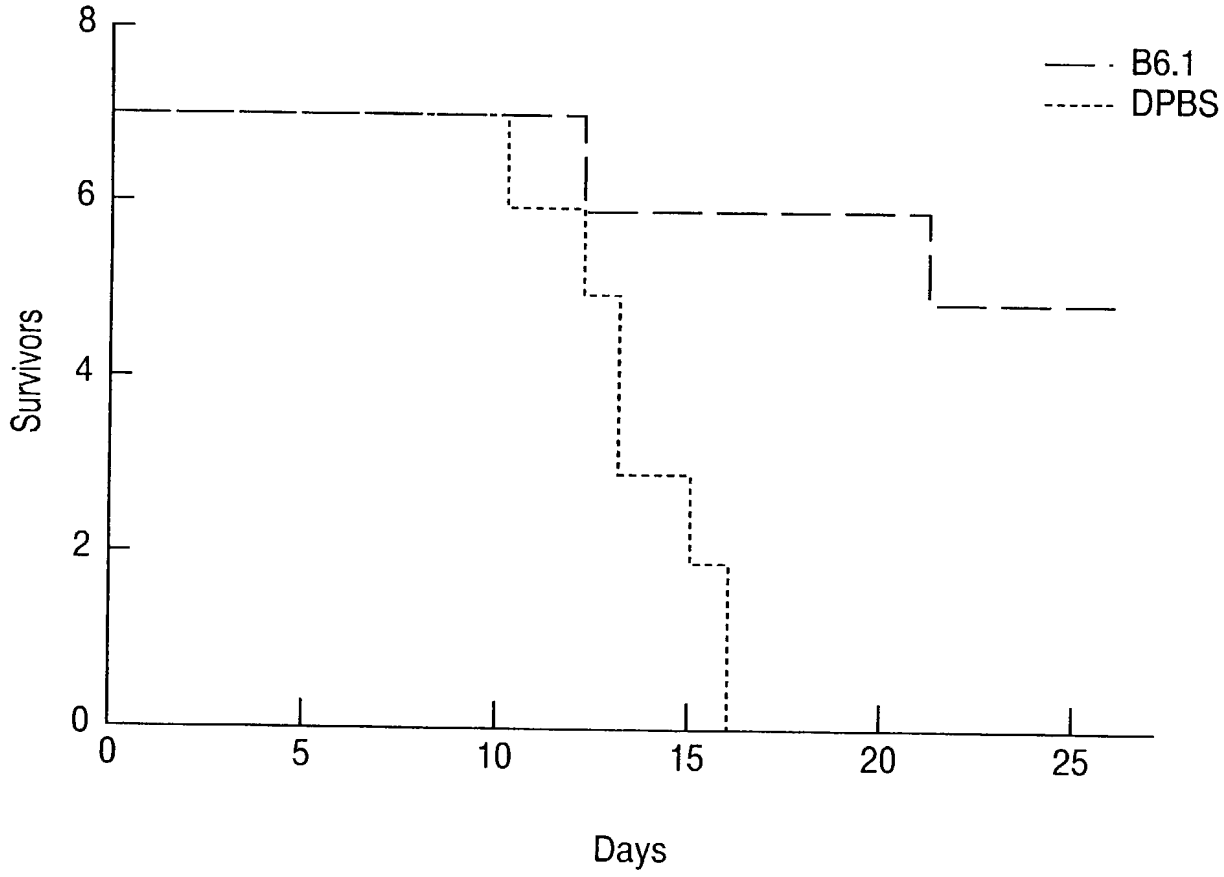


FIG. 11

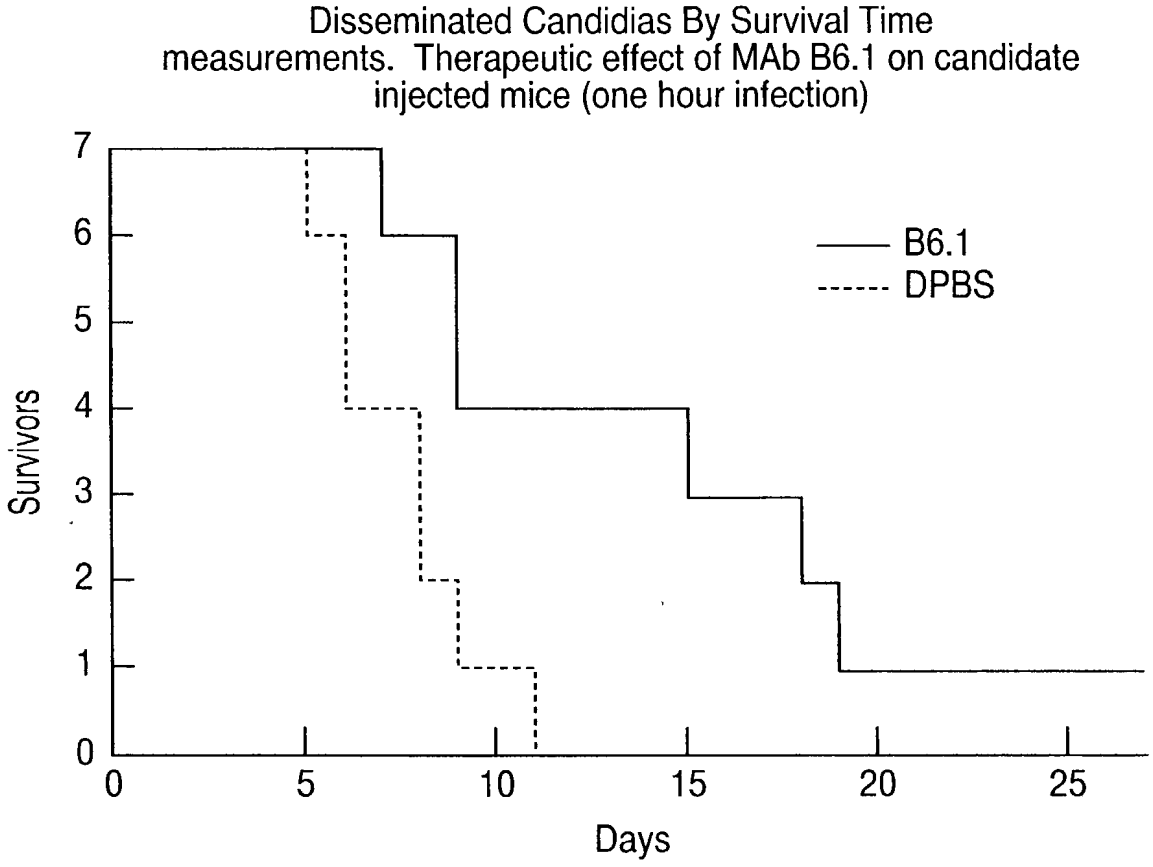

Disseminated Candidias By Survival Time measurements. Therapeutic effect of MAb B6.1 on candidate injected mice (one hour infection)
Survivors
0
1
2
3
4
5
6
7
0
5
10
15
20
25
Days
B6.1
DPBS

FIG. 12

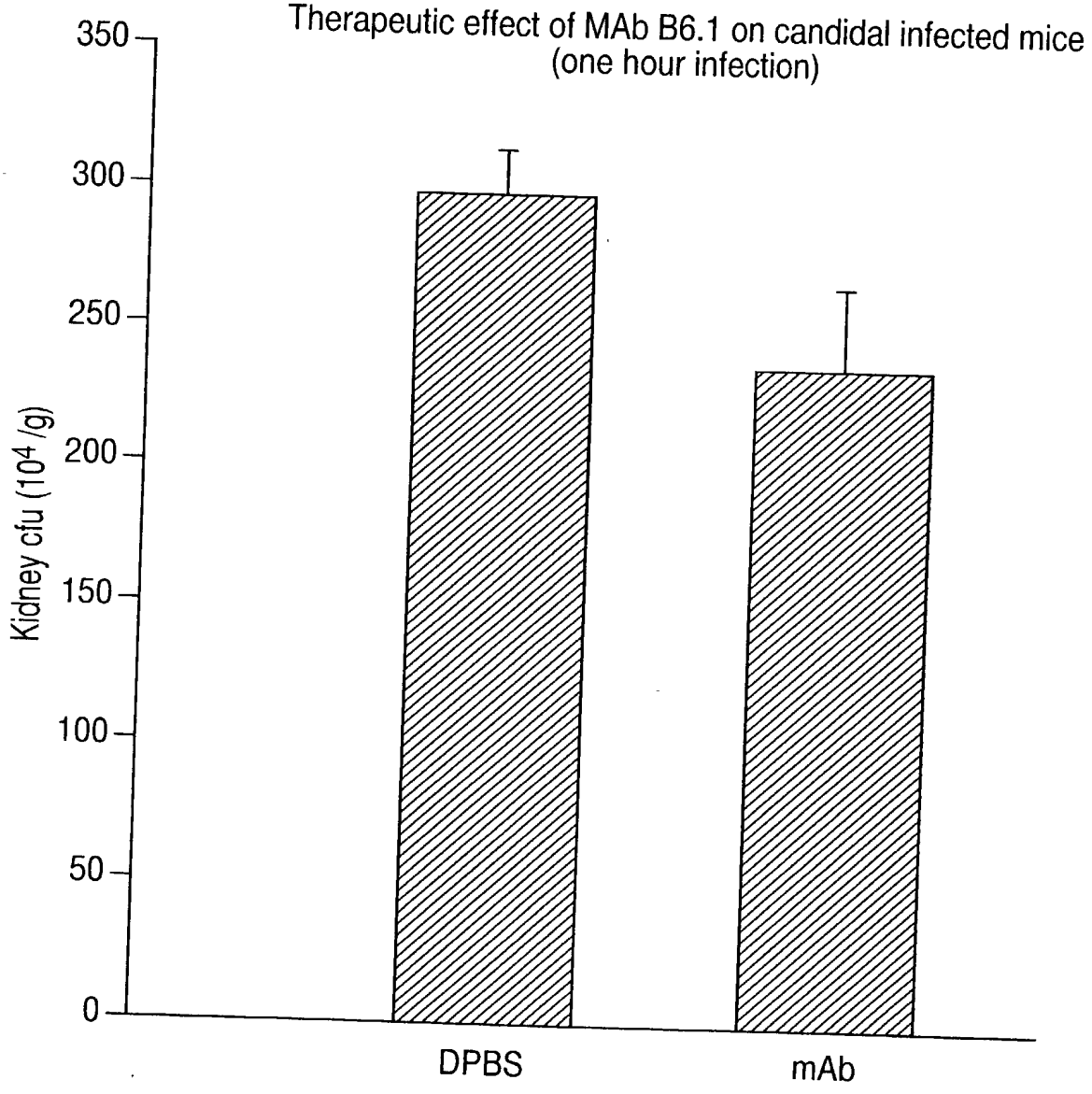

Therapeutic effect of MAb B6.1 on candidal infected mice
(one hour infection)
Kidney cfu (10^4/g)
350
300
250
200
150
100
50
0
DPBS
mAb

FIG. 13

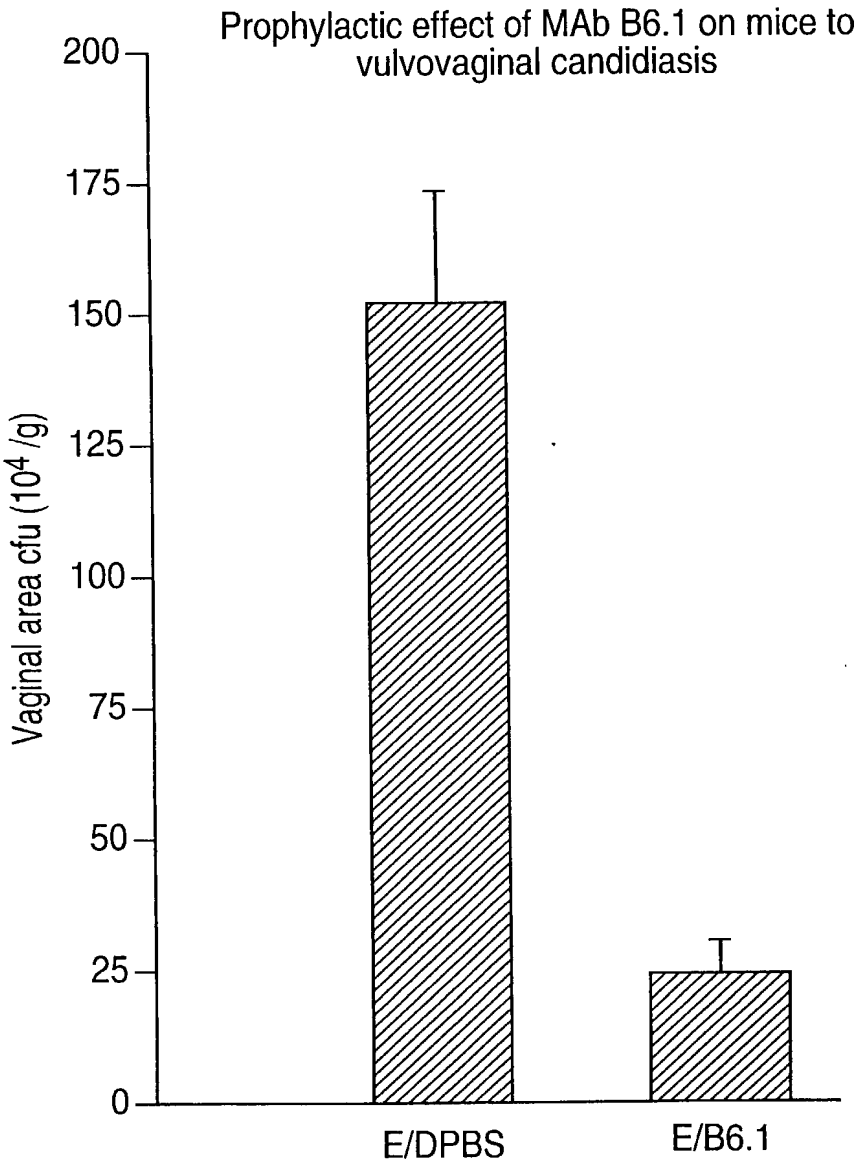

Prophylactic effect of MAb B6.1 on mice to vulvovaginal candidiasis
Vaginal area cfu (10^4 /g)
200
175
150
125
100
75
50
25
0
E/DPBS
E/B6.1

FIG. 14

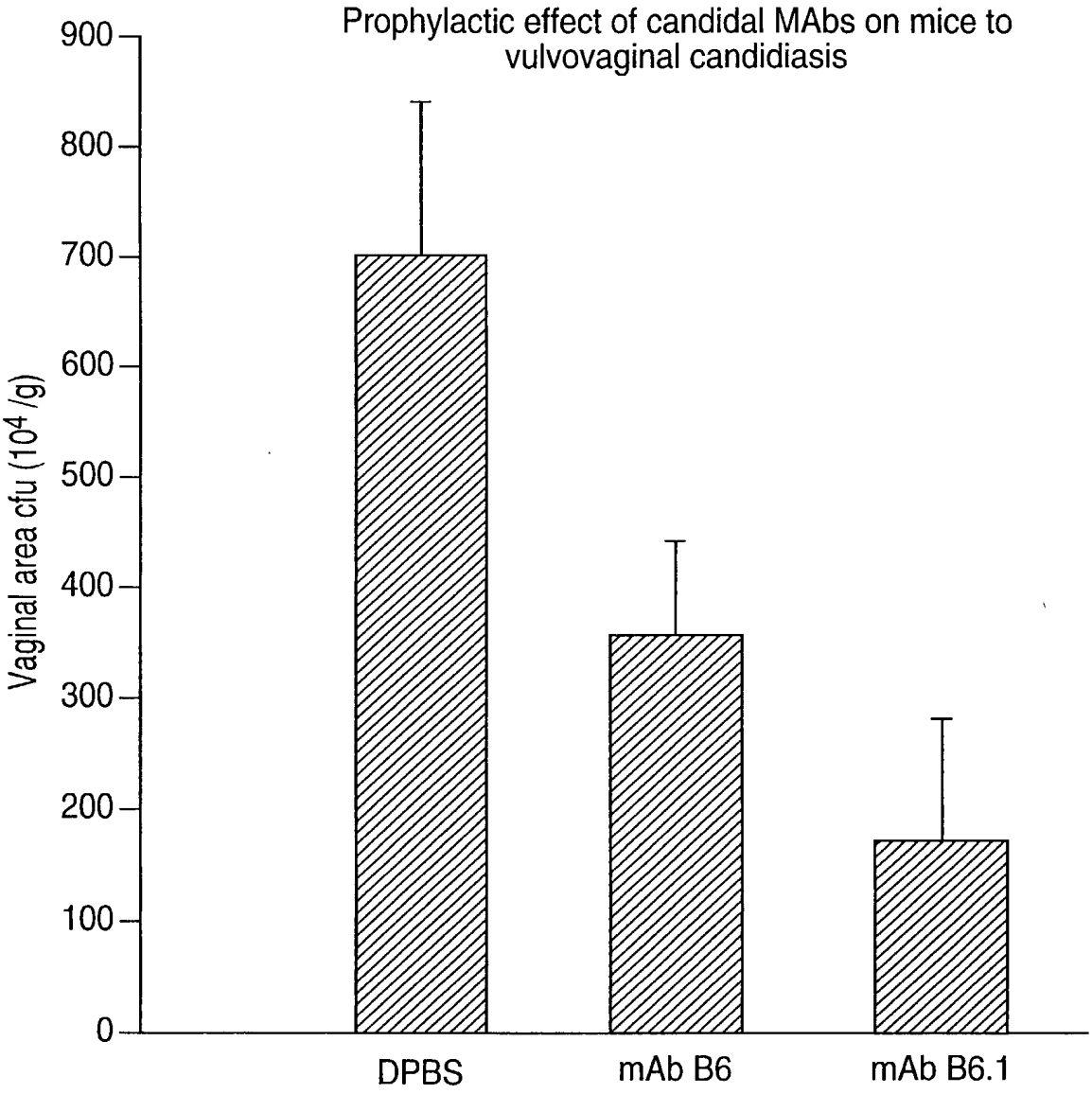
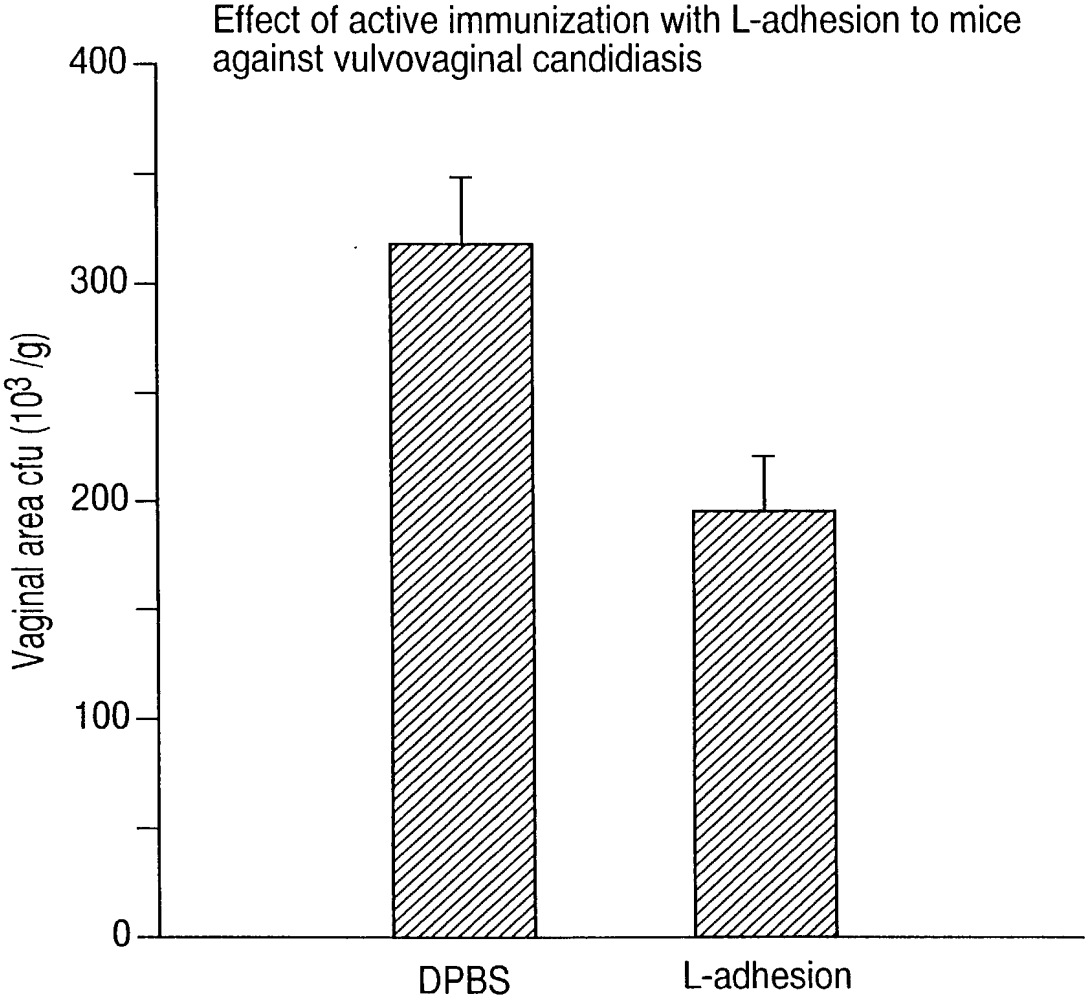

Prophylactic effect of candidal MAbs on mice to vulvovaginal candidiasis
Vaginal area cfu (10^4 /g)
900
800
700
600
500
400
300
200
100
0
DPBS
mAb B6
mAb B6.1

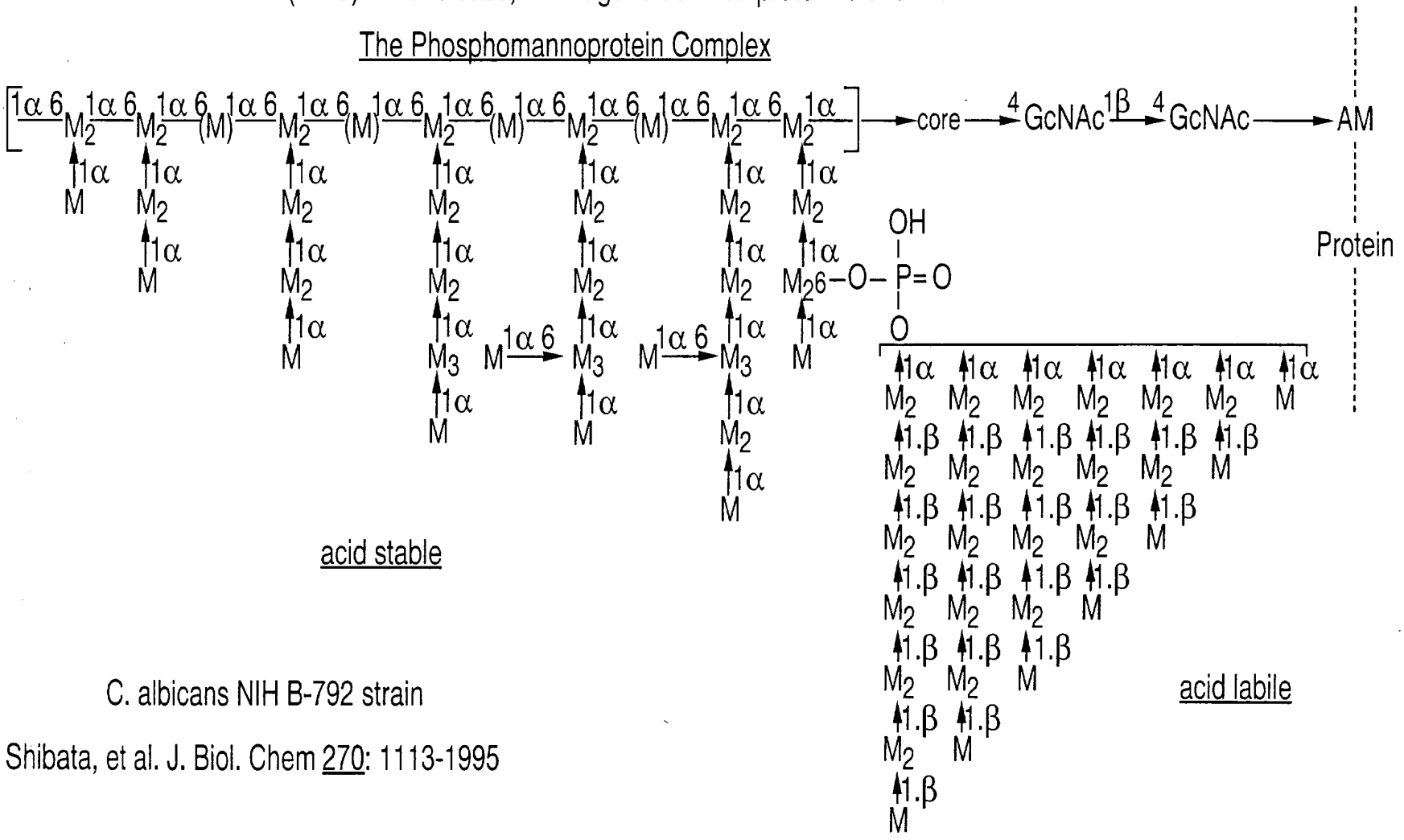
FIG. 15



L = liposome
L02ME = liposome - 2ME raccine prep. Animals received 0.2 ml i.v. (178μg 2ME in 0.2ml) weekly for 5 weeks.
Estiadiol was given subcu, 72 h later *C. albicia* ($5x10^5$) gives intravaginally, 48h after infection vaginal cfu determined.

FIG. 16

Proposed structure of the phosphomannan complex (PMC) - in this case, n-linkage to cell wall protein is shown.



C. albicans NIH B-792 strain

Shibata, et al. J. Biol. Chem 270: 1113-1995

FIG. 17

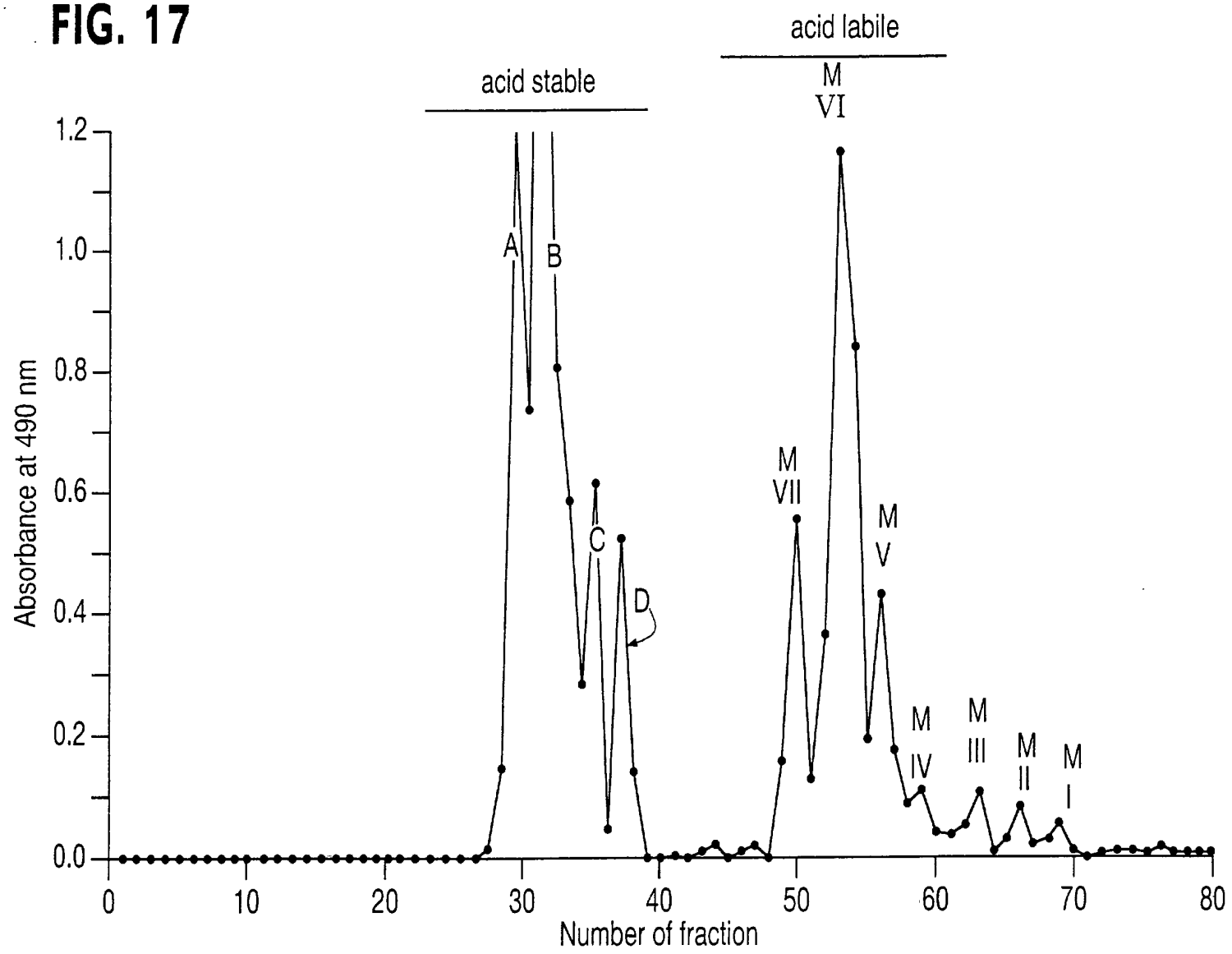
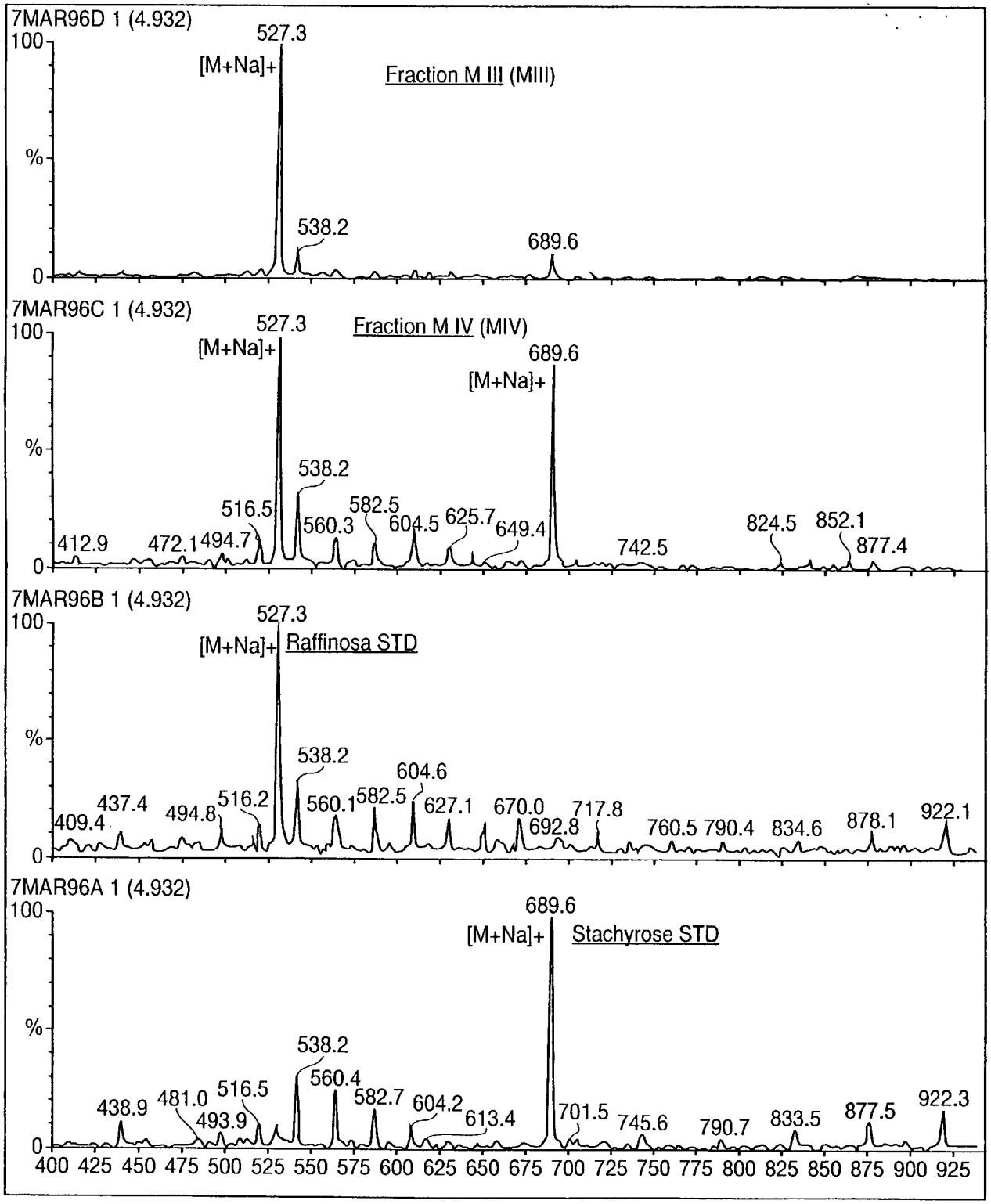
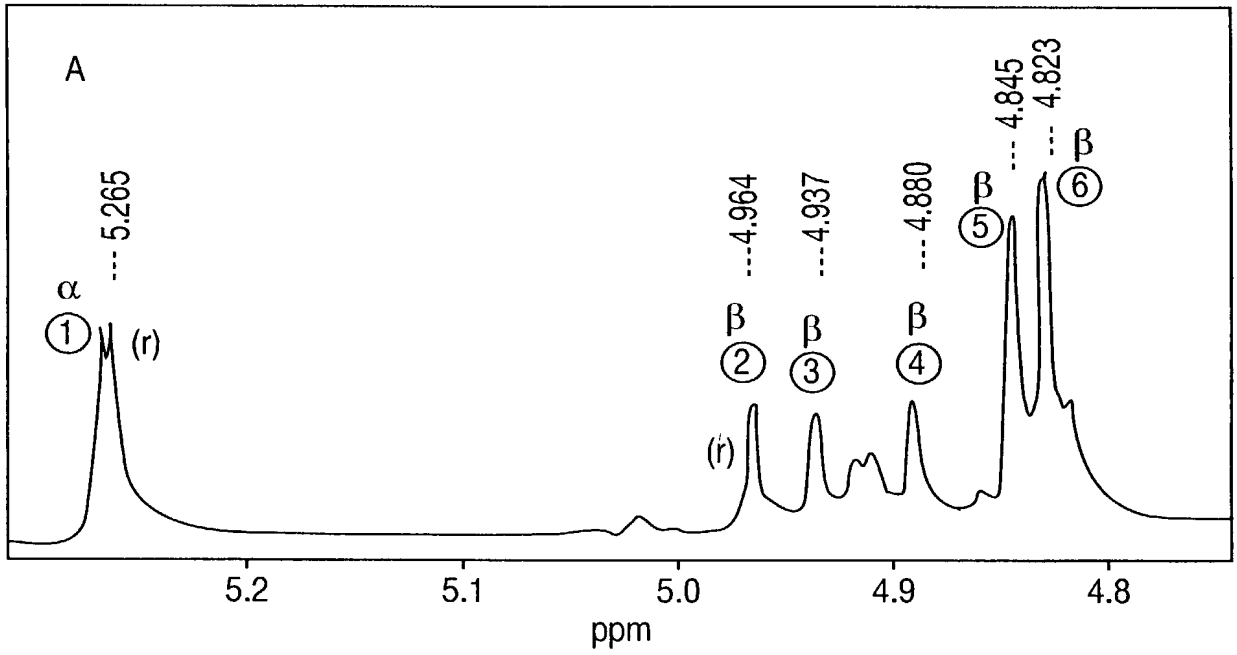

acid stable
acid labile
A
B
C
D
M VI
M VII
M V
M IV
M III
M II
M I
Absorbance at 490 nm
Number of fraction
0.0
0.2
0.4
0.6
0.8
1.0
1.2
0
10
20
30
40
50
60
70
80

FIG. 18



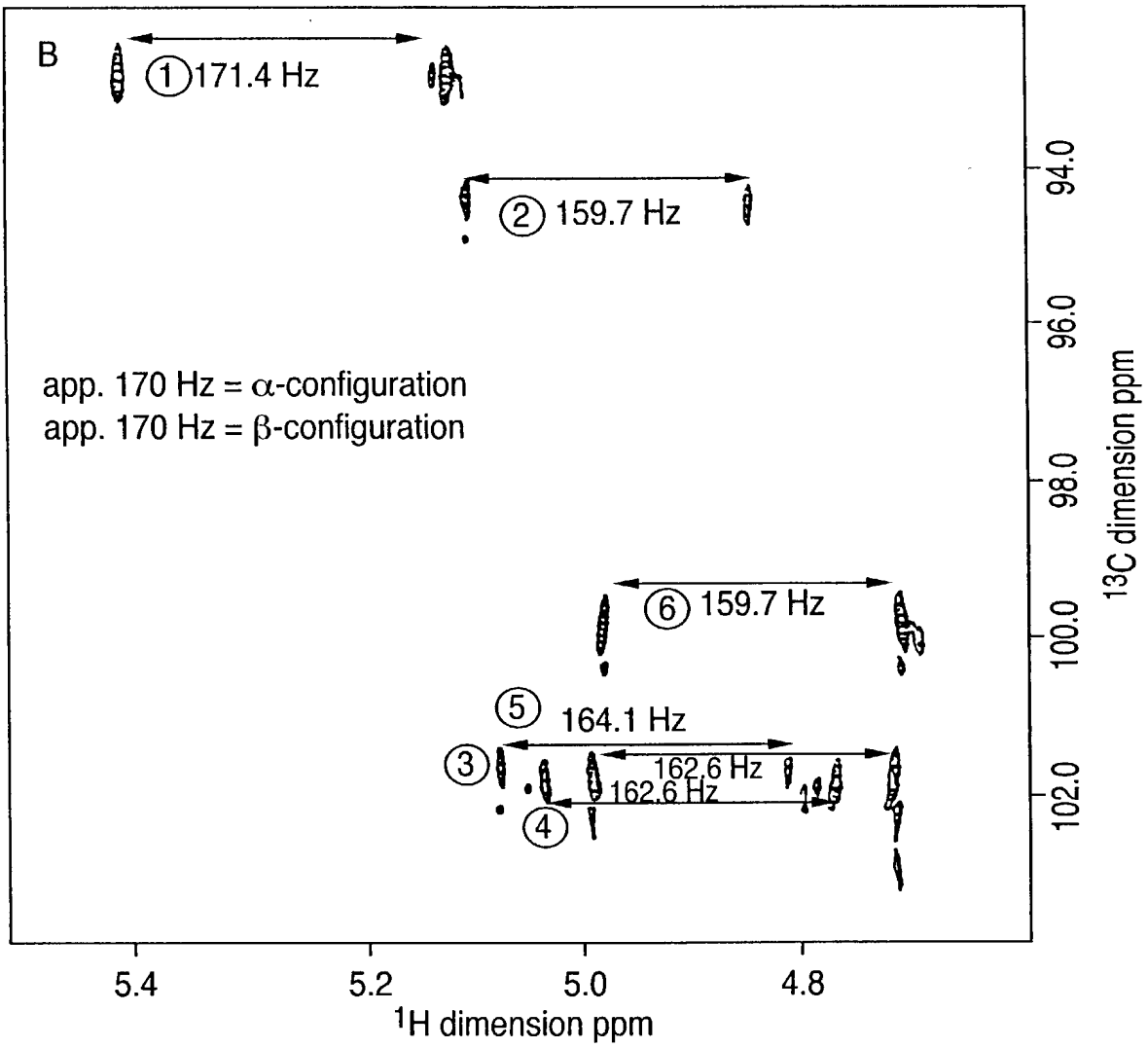
Mass spec results

FIG. 19



dimension H-nmv of B6.1 epitope

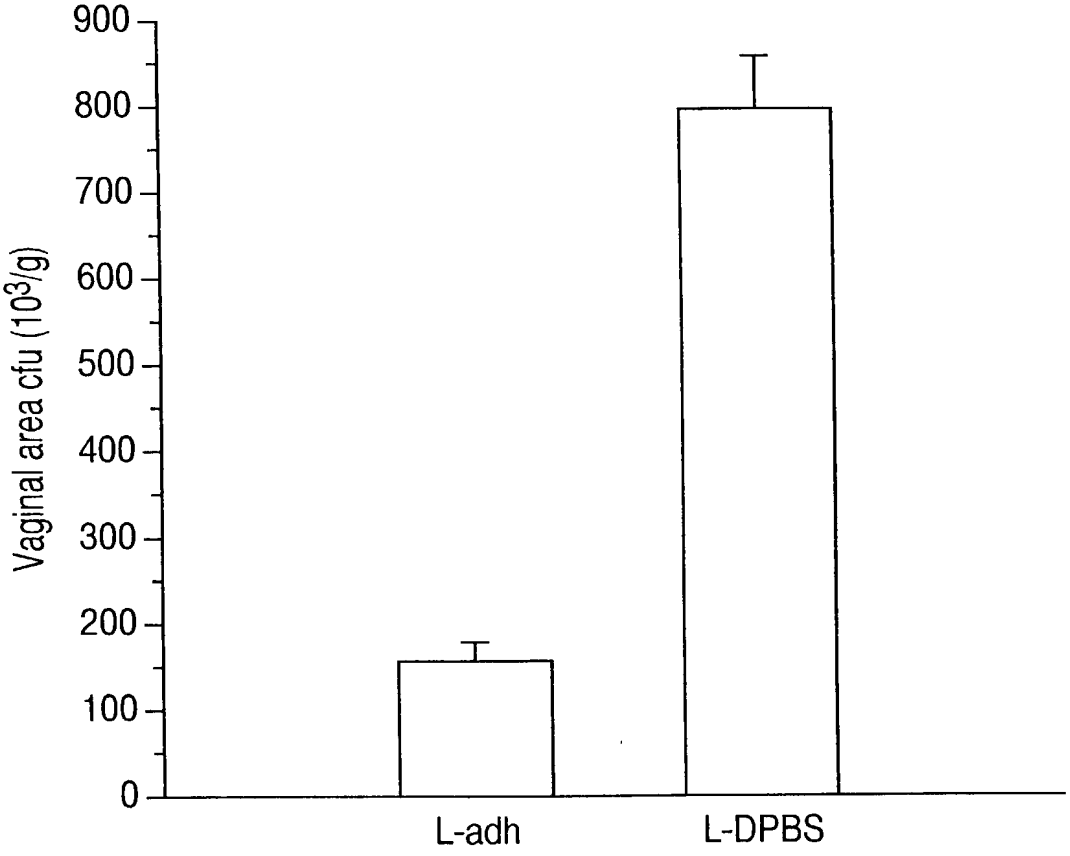
FIG. 20



2 - dNMR of B6.1 epitode

FIG. 21

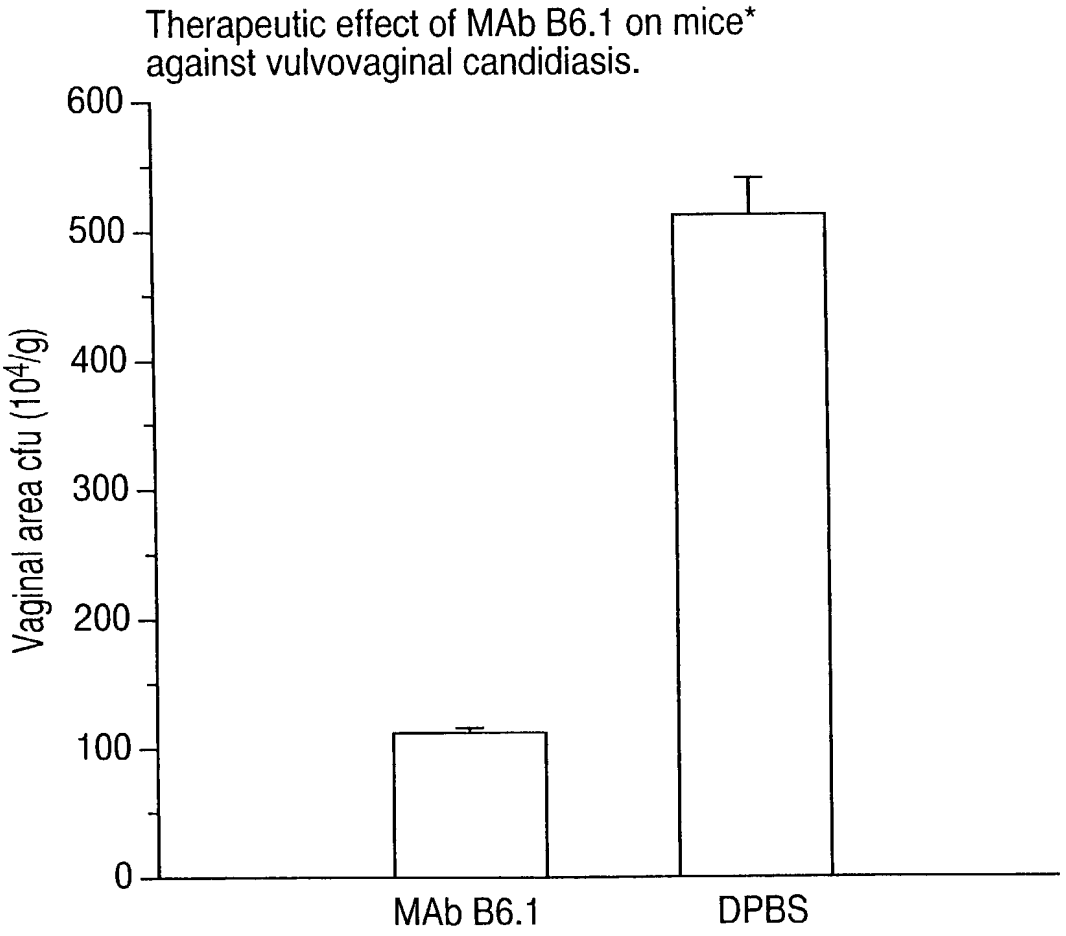
Therapeutic effect of liposome-2ME (L-adh) as a vaccine source on mice* against vulvovaginal candidiasis.



*Animals were infected with *C. albicans* one hr before vaccination.

**Mice were intravaginally infected with *Candida albicans* (5 x 10^5/mouse) 1 hr before i.v. vaccine treatment. Seven days after the infection, vagina areas were collected, and cfu in the areas were measured.

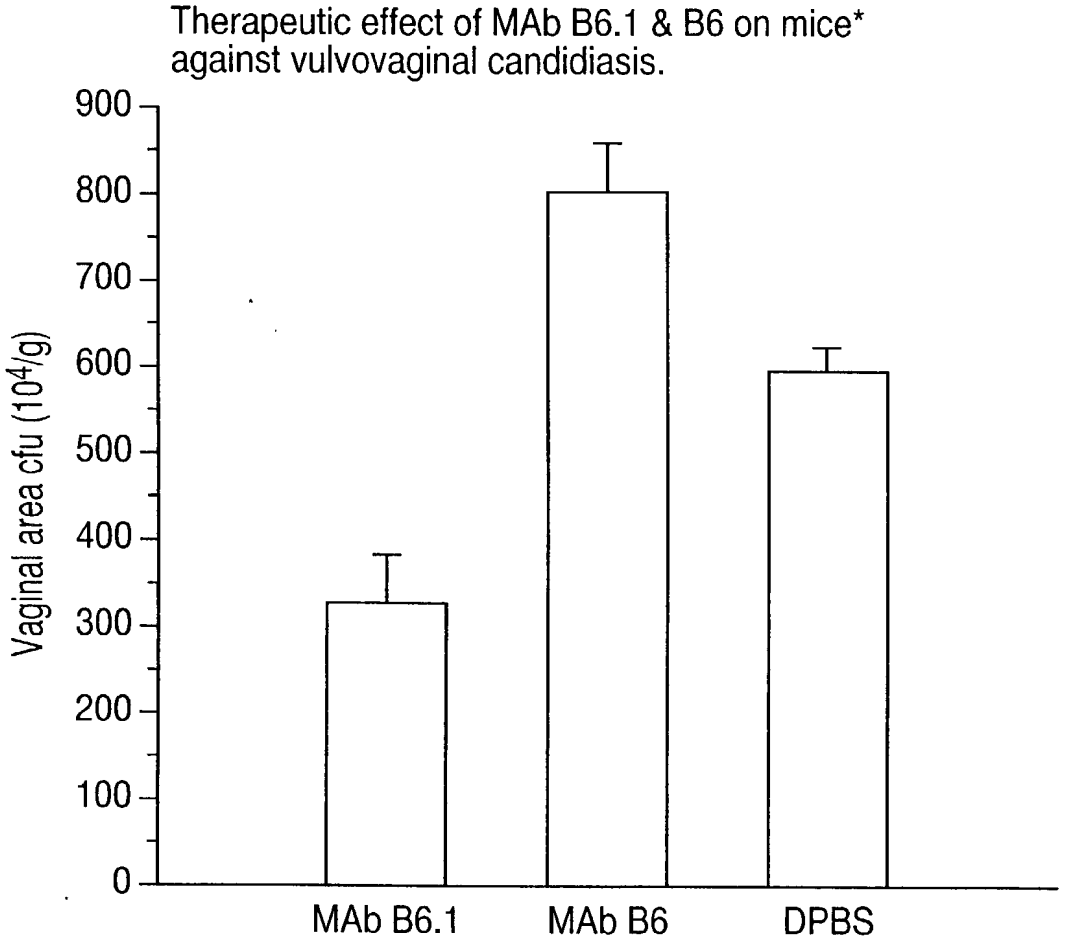
FIG. 22



*Animals were infected with *C. albicans* one hr before antibody treatment.

T=0 $5x10^5$/10µl lvg.
T=1h MAb B6.1 30µl undil 1280, 3.5 mg/ml
T=24h MAb B6.1 10µl
T=48h cfc

FIG. 23



*Animals were infected with *C. albicans* four hrs before first antibody treatment.

T=0	Infect 5x105 ivg	MAb B6.1	MAb B6
T=4h	MAb 30µl ivg	1280, 3.5mg/ml	640, 3.5mg/ml
T=24h	MAb 10µl		
T=48h	cfu		

FIG. 24

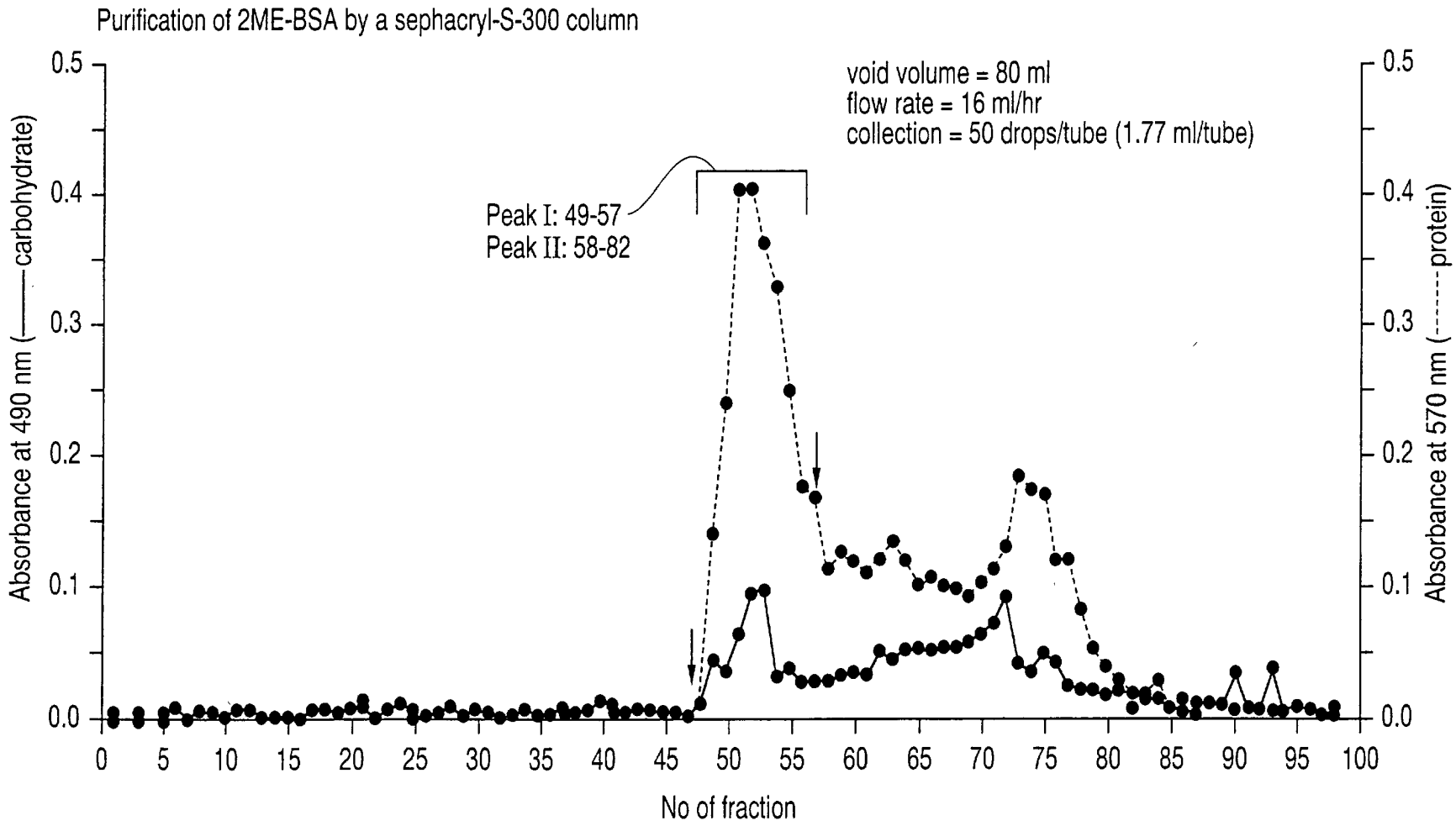
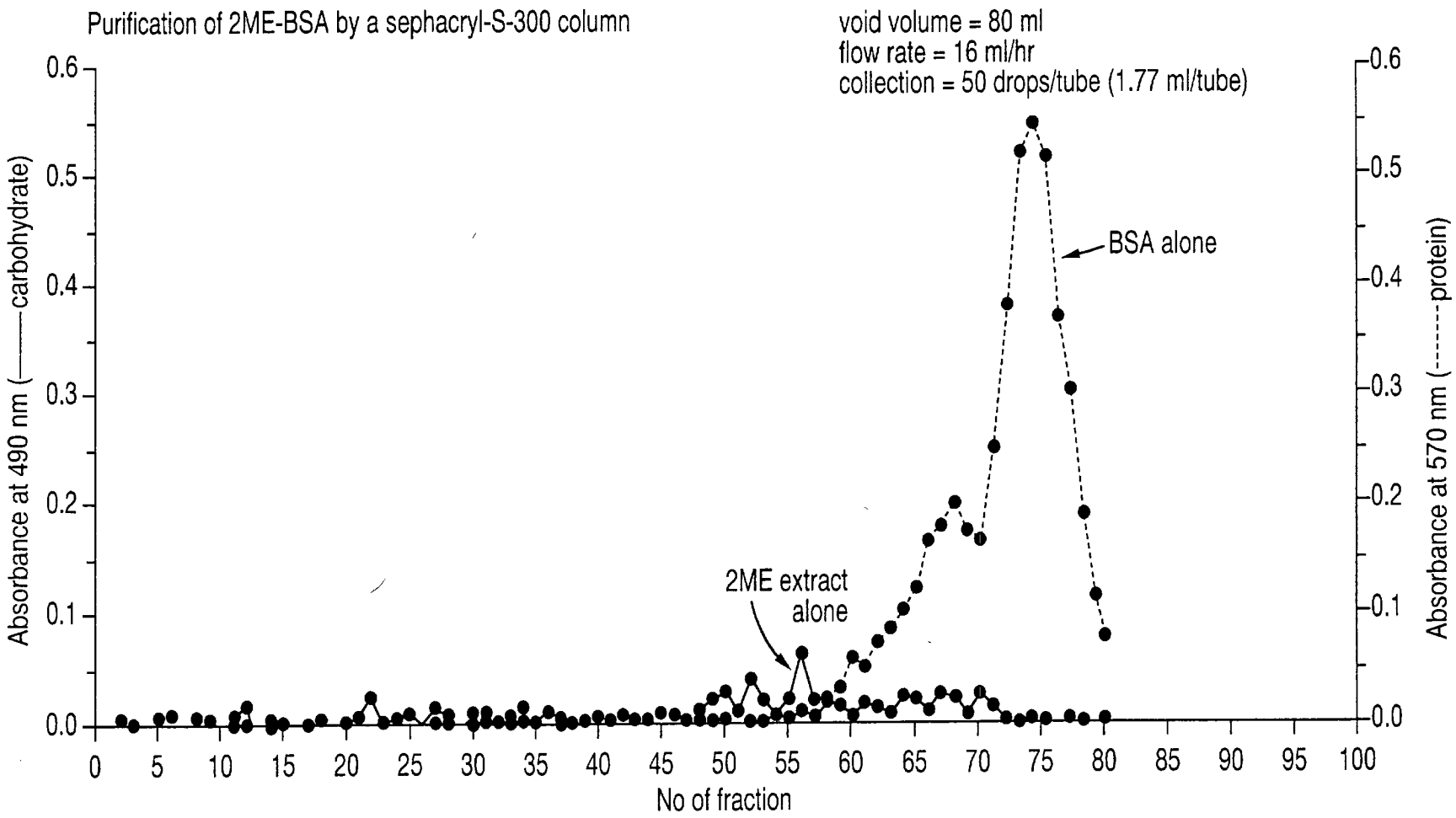

Purification of 2ME-BSA by a sephacryl-S-300 column
void volume = 80 ml
flow rate = 16 ml/hr
collection = 50 drops/tube (1.77 ml/tube)
Peak I: 49-57
Peak II: 58-82
Absorbance at 490 nm (——carbohydrate)
Absorbance at 570 nm (------protein)
No of fraction
0.0
0.1
0.2
0.3
0.4
0.5
0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100

FIG. 25


Purification of 2ME-BSA by a sephacryl-S-300 column
void volume = 80 ml
flow rate = 16 ml/hr
collection = 50 drops/tube (1.77 ml/tube)
Absorbance at 490 nm (——carbohydrate)
Absorbance at 570 nm (----protein)
BSA alone
2ME extract alone
No of fraction
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100